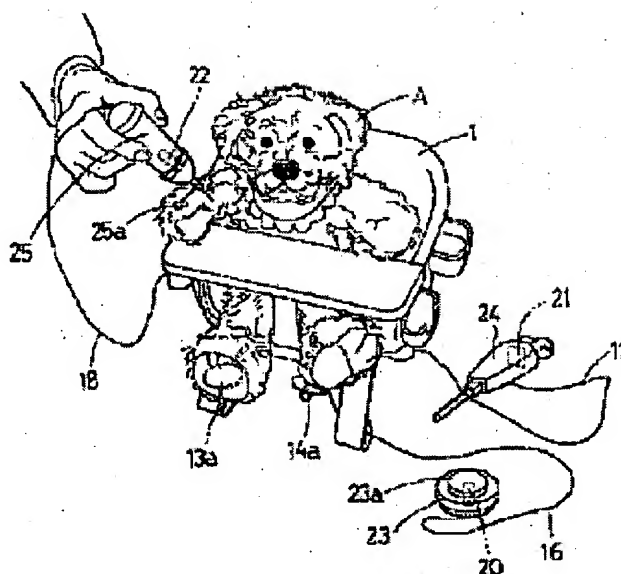


**ACTUATING DEVICE FOR TOY SUCH AS STUFFED DOLL**

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**Abstract of JP10165656**

**PROBLEM TO BE SOLVED:** To expand the range of playing by forming a holding part for holding a toy such as a stuffed doll on a device main body, providing an actuating mechanism for actuating the toy, and providing an engagement member for being engaged with a part of the outside of the toy in the actuating mechanism. **SOLUTION:** For exaple, a stuffed doll toy A formed by imitating a child bear is seated on a device main body (chair) and the both feet are so held as to be mounted on presser plates 13a, 14a in the tips of lever members respectively. A power supply is turned on in this state, for example, a needle 25a of a toy injector 25 is pressed against the arm of the stuffed doll toy A as injecting and when a switch is turned on in stabbing the needle 25a thereinto, the control part rotates a motor and the presser plates 13a, 14a are alternately raised. This operation pushes up the feet of the toy A alternately and actuate them as if thrashing. Then, the control part, outputs the crying sound in a sound synthesis circuit so that the toy looks like as if crying with his/her feet thrashing.

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## CLAIMS

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[Claim(s)]

[Claim 1] The sewing [ which is characterized by having the following requirements ]-based equipments for toys of operation..

(b) at least one operation system which operates the above-mentioned toy is prepared in the body of the forming [ the attaching part which holds sewing etc.-based toys on the body of equipment ] (b) above-mentioned equipment, and the engagement member which engages with a part of outside of the above-mentioned toy is prepared in the above-mentioned operation system -- [claim 2] Said operation systems are the according to claim 1 sewing [ which is characterized by operating the above-mentioned operation system ]-based equipments for toys of operation [claim 3] by the wheel prepared in said body of equipment being interlocked with, moving this starting device, and rotating a wheel. Said operation systems are the according to claim 1 sewing [ which makes a motor driving force and is characterized by preparing at least one detection means to detect change of conditions, such as press, an oscillation, and a sound, on said body of equipment, and the control section which operates the above-mentioned motor based on the detection result of this detection means ]-based equipments for toys of operation.

[Claim 4] Said bodies of equipment are the according to claim 3 sewing [ which is characterized by preparing the voice output section which outputs the voice corresponding to said detection means ]-based equipments for toys of operation.

[Claim 5] Said detection means are the according to claim 3 or 4 sewing [ which is characterized by inputting a detection result into said control section by the cable or wireless while dissociating from said body of equipment and being prepared movable ]-based equipments for toys of operation.

## DETAILED DESCRIPTION

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[Detailed Description of the Invention]

[0001]

[Field of the Invention] This invention relates to the sewing [ which operates sewing etc.-based toys from the outside ]-based equipments for toys of operation.

[0002]

[Description of the Prior Art] Although what doll, animal sewing-, etc.-based toys utter voice conventionally, or moves the body is known well, the operation system which moves the audio station from which voice is taken out to the inside of the body, and the body is prepared, and when these audio stations and operation systems operate, these toys are constituted so that voice may be uttered or the body may be moved.

[0003]

[Problem(s) to be Solved by the Invention] However, with an above-mentioned toy, while the case which held the above-mentioned operation system, the audio station, and the cell had the unnatural feel in the hand when the toy body was touched since various operation systems, the audio station, the cell, etc. were held in the inside of the body, there was inconvenience, such as weight inclining and carrying around and being hard to sometimes have it.

[0004] Moreover, in the case of a small child, it walks around with the sewing basis toy

included in mind in many cases, and it may carry it out also to the outdoors, therefore caused failure.

[0005] Furthermore, when the sewing basis toy included in mind became dirty, it could not clean but had to be made disposal.

[0006] This invention cancels the above-mentioned trouble, even if it is a sewing basis toy which does not have an operation system, it can be operated as \*\* also builds in the operation system, and let it be the technical problem to offer the sewing [ which can expand the width of face of play ]-based equipments for toys of operation.

[0007]

[Means for Solving the Problem] In order to solve said technical problem, the equipments [ sewing etc.-based / concerning this invention ] for toys of operation are characterized by having the following requirements.

(b) At least one operation system which operates the above-mentioned toy is prepared in the body of the forming [ the attaching part which holds sewing etc.-based toys on the body of equipment ] (b) above-mentioned equipment. The above-mentioned operation system may be interlocked with the wheel which is that the engagement member which engages with a part of outside of the above-mentioned toy is prepared in the above-mentioned operation system and which was prepared in the above-mentioned body of equipment, and may operate the above-mentioned operation system by moving this starting device and rotating a wheel.

[0008] Moreover, the above-mentioned operation system may make a motor a driving source, and may prepare at least one detection means to detect change of conditions, such as press, an oscillation, and a sound, on the above-mentioned body of equipment, and the control section which operates the above-mentioned motor based on the detection result of this detection means.

[0009] And as for the above-mentioned body of equipment, it is desirable to have the voice output section which outputs the voice corresponding to the above-mentioned detection means.

[0010] In addition, the above-mentioned detection means may make a detection result input into the above-mentioned control section by the cable or wireless while dissociating from the above-mentioned body of equipment and establishing it movable.

[0011]

[Embodiment of the Invention] Hereafter, a drawing explains the gestalt of operation of this invention. In drawing 1 and drawing 2 a sign 1 The sewing etc.-based equipments for toys of operation (It is hereafter called equipment of operation) is shown, and the attaching part 2 which this equipment 1 of operation imitates the chair with which a small child sits down, is formed, and consists of a back board 3, an armrest 4, and a table 5 is formed. The obstructive member 7 is formed in the shape of standing up so that the doll, animal sewing-, etc.-based toys held by the attaching part 2 may not slide down in the center of anterior part of the seat 6. And the operation system 10 is arranged at the seat 6 bottom. The engagement member 12 which this operation system 10 makes a motor 11 driving force as shown in drawing 3 , and moves up and down by turns is formed. This engagement member 12 consists of two lever members 13 and 14, and when sitting a projection and the sewing basis toy A on a chair 1 ahead of a chair 1, the head of the lever members 13 and 14 is formed so that it may engage with the Oshiage plates 13a and 14a with which the head of a guide peg was prepared at the head of the lever members 13

and 14 (refer to drawing 5 ). A reduction gear 52 meshes to the driver 51 fixed to the output shaft 50 of the above-mentioned motor 11, the friction cam 55 by which the abbreviation triangle-like engagement projected part 54 was formed in one field by projecting is fixed to the revolving shaft 53 of a reduction gear 52, one field of this friction cam 55 is countered, and the free actuation cam 56 is arranged at the revolving shaft 53. While the engagement crevice 57 is formed in the location which can engage with the engagement projected part 54 in the field which counters the above-mentioned friction cam 55 of this actuation cam 56, the actuation pins 58 and 59 which project from a mutually different field and engage with the back end of the lever members 13 and 14 periodically are formed in the location which conflicts to a revolving shaft 53. This actuation cam 56 is energized so that a pressure welding may always be carried out to the friction cam 55 by the spring 60 by which the end was fixed to the revolving shaft 53. It rotates centering on a shaft 61 and the Oshiage plates 13a and 14a upper-\*\* the lever members 13 and 14 depressed by the actuation pins 58 and 59. In addition, when a load is applied to the Oshiage plates 13a and 14a, it is constituted so that engagement to the engagement projected part 54 and the engagement crevice 57 may separate and the effect of a load may not attain to an operation system 10.

[0012] And detection means 20, 21, and 22 to detect change of conditions, such as press, an oscillation, and a sound, through lead wire 16, 17, and 18 are connected to the control section 15 which controls the above-mentioned motor 11. The detection means 20 consists of ON/OFF switches arranged in the stethoscope toy 23 which imitated the stethoscope, such as a pushbutton switch and a leaf switch, and when this stethoscope toy 23 is pushed against some bodies of the sewing basis toy A and switch disc-like moving-part 23a withdraws, it is constituted by making a switch 20 push and turn on so that the above-mentioned motor 11 may carry out fixed time amount actuation. Moreover, the detection means 21 consists of ON/OFF switches arranged in the almost empty toy 24 which attached the bell in the upper part and imitated GARAGARA, such as a vibration switch and a pendulum switch, and when the almost empty toy 24 is shaken so that the sewing basis toy A may be soothed, a vibration switch 21 turns it on and it carries out fixed time amount actuation of the above-mentioned motor 11. And the detection means 22 consists of ON/OFF switches arranged in the syringe toy 25 which imitated the syringe, such as a microswitch and a leaf switch, and when the head of this syringe toy 25 is forced on some bodies of the sewing basis toy A and needle 25a withdraws in the syringe toy 25, it is controlled by the control section 15 by making a switch 22 push and turn on so that the above-mentioned motor 11 carries out fixed time amount actuation.

[0013] Furthermore, the above-mentioned control section 15 is controlling the voice output section 26 to be shown in drawing 4 . This voice output section 26 consists of an electronic speech circuit 27 and a loudspeaker 28, and when the above-mentioned switches 20, 21, and 22 turn on, it is constituted so that voice data which is different for every switch based on directions of a control section 15 from among the voice data memorized beforehand in the electronic speech circuit 27 may be outputted and it may be outputted as voice from a loudspeaker 28. When the switch 21 of the almost empty toy 24 turns [ the voice which feels ticklish when the switch 20 of the stethoscope toy 23 turns on ] on and the switch 22 of the syringe toy 25 turns [ a laughing voice ] on, this voice data is constituted so that the predetermined time output of the cry may be carried out, respectively. In addition, in drawing 4 , in a sign 29, an electric power switch and 30

show a power-source cell, and 31 shows the driver circuit of a motor 11.

[0014] According to the equipment of the above-mentioned configuration of operation, the sewing basis toy A formed by imitating the child of a bear is sat on the body 1 of equipment (chair), and it is made to hold to an attaching part 2 so that both guide pegs may appear in the Oshiage plates 13a and 14a at the head of the lever members 13 and 14, respectively. As an electric power switch 29 is turned on in this condition, for example, it is shown in drawing 5, needle 25a of the syringe toy 25 is forced so that the arm of the sewing basis toy A may be injected. Since a switch 22 is made to turn on when it pushes and needle 25a withdraws, a control section 15 rotates a motor 11 and rotates the actuation cam 56 through a reduction gear 52 and the friction cam 55. Since the actuation pins 58 and 59 will engage with the back end of the lever members 13 and 14 by turns and will depress this if the actuation cam 56 rotates, Oshiage plate 13a/14a is raised by turns. Since the Oshiage plates 13a and 14a descend by self-weight, and the lever members 13 and 14 will be moved up and down by turns with the revolution of the actuation cam 56, it will engage with the guide peg of the sewing basis toy A by turns and a guide peg will be pushed up by turns if engagement of the actuation pins 58 and 59 and the lever members 13 and 14 separates, it is made to operate as \*\* is also flapping the guide peg. Since it directs that a control section 15 outputs the voice of a cry to an electronic speech circuit 27 at this time and a cry is outputted from a loudspeaker 28, it can show as it is crying, while the sewing basis toy A dislikes injection and \*\* also makes a guide peg flap.

[0015] Moreover, when the stethoscope toy 23 is pressed against some bodies of the sewing basis toy A, since moving-part 23a withdraws and a switch 20 is made to turn on, as a motor 11 is rotated and being mentioned above, a control section 15 moves the lever members 13 and 14 up and down by turns, and moves the guide peg of a sewing basis toy up and down. Since a guide peg is made to flap at the same time the voice which feels ticklish from a loudspeaker 28 is outputted, since a control section 15 issues directions at this time so that the voice which feels ticklish to an electronic speech circuit 27 simultaneously may be outputted, while the sewing basis toy A feels ticklish and \*\* also raises voice, it can show as the guide peg is made to flap.

[0016] And when the almost empty toy 24 is shaken, since a switch 21 turns on by oscillation, as a motor 11 is rotated and being mentioned above, a control section 15 moves the lever members 13 and 14 up and down by turns, and moves the guide peg of a sewing basis toy up and down. Since it directs that a control section 15 outputs the voice of a laughing voice to an electronic speech circuit 27 simultaneously at this time and a laughing voice is outputted from a loudspeaker 28, it seems to laugh, while the sewing basis toy A is pleased also with \*\* and it makes a guide peg flap.

[0017] Even if it is the sewing basis toy which does not have an operation system as mentioned above, \*\* can also be operated by making it sit on a chair and making a detection means detect change of a condition as the voice output section and the operation system which utter voice or move the body exist in the interior of a sewing basis toy. And since it is not necessary to make the equipment for making it operate hold in the interior of a sewing basis toy, the original soft feel which it has [ sewing-based ] is acquired, and unnaturalness can be wiped away.

[0018] Moreover, while seeming to have blown the life into the mere sewing basis toy by making the sewing basis toy included in mind hold on the body of equipment and

producing the attachment to a toy, the width of face of play can be expanded. And since the mechanism is not built in, it can clean easily, and forever, in the clean condition, a sewing basis toy can be made to be able to use it and big effectiveness can be demonstrated also in the field of health administration.

[0019] In addition, as shown in drawing 6 , the voice circuit changing switch 32 is formed in an electronic speech circuit 27, and you may enable it to choose voice corresponding to the class of sewing basis toy by changing the voice circuit changing switch 32 according to the classes (a girl, a boy, animal, etc.) of sewing basis toy. Moreover, the detection means which becomes a body of equipment from sound sensors, such as a capacitor microphone which detects a sound, is arranged, an operation system is operated in response to a sound, and you may make it operate a sewing basis toy.

[0020] Moreover, with above-mentioned equipment of operation, although the detection result of a detection means is inputted into the control section through lead wire, it may form a transmitter in a detection means and may form a receiver in a control section. The result detected with the detection means is transmitted with a transmitter, by receiving with the receiver formed in the control section, an operation system can be operated distantly and sewing etc.-based toys can be operated.

[0021] Next, as shown in drawing 7 , the equipment of operation with which the body of equipment was formed by imitating a bed is explained. The quilt 41 which is the attachment component held so that the sewing basis toy A may not fall to this bed 40 is formed free [ attachment and detachment ] with the surface fastener 42.

[0022] And the detection means 43 set to head board 40a set up at the end of a bed 40 from the timer switch which imitated the alarm clock is established, and the operation system 44 which moves the guide peg of the sewing basis toy A up and down is arranged at the bed 40 bottom. This operation system 44 consists of an actuation member 45 which is arranged in the location corresponding to the guide peg of the sewing basis toy A, and moves up and down, and a motor 11 which drives this actuation member 45, and this motor 11 is controlled by the control section 15 to operate, if the above-mentioned timer switch 43 detects the predetermined passage of time. In addition, the above-mentioned control section 15 is also controlling the voice output section 26 which outputs the bell sound and cry of an alarm clock.

[0023] Since according to the equipment of the above-mentioned configuration of operation a switch 43 turns on after predetermined time progress if an electric power switch 29 is turned on and the timer switch 43 is set as shown in drawing 8 , a control section 15 operates a motor 11, moves the actuation member 45 up and down, and thrusts up the guide peg of the sewing basis toy A by turns while it makes the bell sound data of an alarm clock output to an electronic speech circuit 27 and makes a bell sound output from a loudspeaker 28. It can be made to operate so that Bata Bata of the guide peg may be carried out a sewing basis toy being raised also for \*\* with an alarm clock, and crying, even if it is the sewing basis toy which is made to also suspend an audio output while a control section 15 makes a cry output to the voice output section 26 instead of a bell sound when a guide peg begun to be thrust up up and down, and stopping a motor 11 after predetermined time progress, and does not have an operation system.

[0024] As mentioned above, the sewing basis toy held by the attaching part at the body of equipment If a detection means detects change of a condition, while operating an operation system and operating the whole body or some of sewing basis toy Since the

voice corresponding to a detection means is outputted, while \*\* also gives an illusion to which sewing-basis is operating. While seeming to have blown the life into the mere sewing basis toy by holding the sewing basis toy included in mind and cherishing the love over a toy, the width of face of play can be expanded. And since it can clean easily [ always ] when it becomes dirty, since there is no mechanism in a sewing basis toy, it can be forever kept idle in the clean condition, and big effectiveness can be demonstrated also in the field of health administration.

[0025] And a wheel is prepared in the body of equipment and you may make it operate an operation system by rotating this wheel. As this equipment 101 of operation is shown in drawing 9, a baby carriage is imitated and it is formed, and by carrying out push length with a handle 105 in order, the attaching part 102 which imitated the safety belt is formed, a front wheel 103 and a rear wheel 104 are formed in the lower part, and a front wheel 103 and a rear wheel 104 are constituted so that it may rotate and move forward and retreat, and the above-mentioned front wheel 103 is being interlocked with the starting device 10.

[0026] The reduction gear 52 with which an operation system 10 gears with the driver 107 fixed to the axle 106 of a front wheel 103 as shown in drawing 10, Counter one field of the friction cam 55 fixed to the revolving shaft 53 of a reduction gear 52, and this friction cam 55, and free actuation cams 56 are consisted of by the revolving shaft 53. The actuation pins 58 and 59 which projected from a field which is mutually different in the location which conflicts to the revolving shaft 53 of this actuation cam 56 engage with the lever members 13 and 14 by turns. The lever members 13 and 14 depressed by the actuation pins 58 and 59 are constituted so that it may rotate centering on a shaft 61 and the Oshiage plates 13a and 14a may upper-\*\*. In addition, in drawing 9, the explanation is omitted as that drawing 3 and a same sign indicate at least the said division to be.

[0027] According to the equipment of the above-mentioned configuration of operation, sewing-basis (not shown) put on equipment 101 of operation is held by the safety belt 102 which is an attaching part, and does not fall from equipment 101 of operation. It moves forward rotating wheels 103 and 104, if equipment 101 of operation is ahead pushed with a handle 105 in this condition. Since the lever members 13 and 14 which are engagement members can be moved up and down by turns, the Oshiage plates 13a and 14 can be made to be able to engage with a sewing-based guide peg by turns, since the operation system 10 is being interlocked with the front wheel 103, and this can be moved up and down, sewing-basis can be glad and it can be made to operate as the guide peg is made to flap.

[0028]

[Effect of the Invention] According to invention of claim 1, if sewing [ which was held by the attaching part at the body of equipment ]-based toys operate an operation system, they will operate the whole body or some of sewing etc.-based toy, and even if it is sewing-basis in which the operation system is not built, they can also operate \*\* as the operation system is built in. Moreover, since it can clean easily [ always ] when it becomes dirty, since it is not necessary to hold a mechanism in a sewing basis toy, it can be forever kept idle with a beautiful sewing basis toy, and big effectiveness can be demonstrated also in the field of health administration.

[0029] According to invention of claim 2, while being able to operate a sewing basis toy



with simple structure, the equipment of energy saving with which it can play also in the open air of operation is realizable.

[0030] According to invention of claim 3, even if it is the sewing basis toy with which a control section rotates a motor automatically, an operation system is operated, and, as for sewing [ which was held by the attaching part at the body of equipment ]-based toys, the operation system is not built in if a detection means detects change of a condition, \*\* can also be operated as the operation system is built in the sewing basis toy. Moreover, since actuation by equipment of operation is also added in addition to the own actuation of a sewing basis toy when the operation system is built in the sewing basis toy, complicated actuation can be carried out to a sewing basis toy.

[0031] Even if it is the same actuation, the method of recognition the actuation can be made to be changed with voice, and even if it is a mere sewing basis toy, it can be made to change with the combination of a sound and actuation to the sewing basis toy which has a real feeling more, since according to invention of claim 4 the voice corresponding to a detection means is outputted while a sewing basis toy moves the body.

[0032] Since voice can be made to output while being able to operate equipment of operation by contacting a detection means to the part of the arbitration of a sewing basis toy, or giving an external stimulus of a sound, an oscillation, etc. to a detection means according to invention of claim 5, the width of face of play can be expanded further.

## TECHNICAL FIELD

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[Field of the Invention] This invention relates to the sewing [ which operates sewing etc.-based toys from the outside ]-based equipments for toys of operation.

## PRIOR ART

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[Description of the Prior Art] Although what doll, animal sewing-, etc.-based toys utter voice conventionally, or moves the body is known well, the operation system which moves the audio station from which voice is taken out to the inside of the body, and the body is prepared, and when these audio stations and operation systems operate, these toys are constituted so that voice may be uttered or the body may be moved.

## EFFECT OF THE INVENTION

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[Effect of the Invention] According to invention of claim 1, if sewing [ which was held by the attaching part at the body of equipment ]-based toys operate an operation system, they will operate the whole body or some of sewing etc.-based toy, and even if it is sewing-basis in which the operation system is not built, they can also operate \*\* as the operation system is built in. Moreover, since it can clean easily [ always ] when it becomes dirty, since it is not necessary to hold a mechanism in a sewing basis toy, it can be forever kept idle with a beautiful sewing basis toy, and big effectiveness can be demonstrated also in the field of health administration.

[0029] According to invention of claim 2, while being able to operate a sewing basis toy with simple structure, the equipment of energy saving with which it can play also in the open air of operation is realizable.

[0030] According to invention of claim 3, even if it is the sewing basis toy with which a control section rotates a motor automatically, an operation system is operated, and, as for sewing [ which was held by the attaching part at the body of equipment ]-based toys, the operation system is not built in if a detection means detects change of a condition, \*\* can also be operated as the operation system is built in the sewing basis toy. Moreover, since actuation by equipment of operation is also added in addition to the own actuation of a sewing basis toy when the operation system is built in the sewing basis toy, complicated actuation can be carried out to a sewing basis toy.

[0031] Even if it is the same actuation, the method of recognition the actuation can be made to be changed with voice, and even if it is a mere sewing basis toy, it can be made to change with the combination of a sound and actuation to the sewing basis toy which has a real feeling more, since according to invention of claim 4 the voice corresponding to a detection means is outputted while a sewing basis toy moves the body.

[0032] Since voice can be made to output while being able to operate equipment of operation by contacting a detection means to the part of the arbitration of a sewing basis toy, or giving an external stimulus of a sound, an oscillation, etc. to a detection means according to invention of claim 5, the width of face of play can be expanded further.

## TECHNICAL PROBLEM

[Problem(s) to be Solved by the Invention] However, with an above-mentioned toy, while the case which held the above-mentioned operation system, the audio station, and the cell had the unnatural feel in the hand when the toy body was touched since various operation systems, the audio station, the cell, etc. were held in the inside of the body, there was inconvenience, such as weight inclining and carrying around and being hard to sometimes have it.

[0004] Moreover, in the case of a small child, it walks around with the sewing basis toy included in mind in many cases, and it may carry it out also to the outdoors, therefore caused failure.

[0005] Furthermore, when the sewing basis toy included in mind became dirty, it could not clean but had to be made disposal.

[0006] This invention cancels the above-mentioned trouble, even if it is a sewing basis toy which does not have an operation system, it can be operated as \*\* also builds in the operation system, and let it be the technical problem to offer the sewing [ which can expand the width of face of play ]-based equipments for toys of operation.

## MEANS

[Means for Solving the Problem] In order to solve said technical problem, the equipments [ sewing etc.-based / concerning this invention ] for toys of operation are characterized by having the following requirements.

(b) At least one operation system which operates the above-mentioned toy is prepared in the body of the forming [ the attaching part which holds sewing etc.-based toys on the body of equipment ] (b) above-mentioned equipment. The above-mentioned operation system may be interlocked with the wheel which is that the engagement member which engages with a part of outside of the above-mentioned toy is prepared in the above-

mentioned operation system and which was prepared in the above-mentioned body of equipment, and may operate the above-mentioned operation system by moving this starting device and rotating a wheel.

[0008] Moreover, the above-mentioned operation system may make a motor a driving source, and may prepare at least one detection means to detect change of conditions, such as press, an oscillation, and a sound, on the above-mentioned body of equipment, and the control section which operates the above-mentioned motor based on the detection result of this detection means.

[0009] And as for the above-mentioned body of equipment, it is desirable to have the voice output section which outputs the voice corresponding to the above-mentioned detection means.

[0010] In addition, the above-mentioned detection means may make a detection result input into the above-mentioned control section by the cable or wireless while dissociating from the above-mentioned body of equipment and establishing it movable.

[0011]

[Embodiment of the Invention] Hereafter, a drawing explains the gestalt of operation of this invention. In drawing 1 and drawing 2 a sign 1 The sewing etc.-based equipments for toys of operation (It is hereafter called equipment of operation) is shown, and the attaching part 2 which this equipment 1 of operation imitates the chair with which a small child sits down, is formed, and consists of a back board 3, an armrest 4, and a table 5 is formed. The obstructive member 7 is formed in the shape of standing up so that the doll, animal sewing-, etc.-based toys held by the attaching part 2 may not slide down in the center of anterior part of the seat 6. And the operation system 10 is arranged at the seat 6 bottom. The engagement member 12 which this operation system 10 makes a motor 11 driving force as shown in drawing 3, and moves up and down by turns is formed. This engagement member 12 consists of two lever members 13 and 14, and when sitting a projection and the sewing basis toy A on a chair 1 ahead of a chair 1, the head of the lever members 13 and 14 is formed so that it may engage with the Oshiage plates 13a and 14a with which the head of a guide peg was prepared at the head of the lever members 13 and 14 (refer to drawing 5). A reduction gear 52 meshes to the driver 51 fixed to the output shaft 50 of the above-mentioned motor 11, the friction cam 55 by which the abbreviation triangle-like engagement projected part 54 was formed in one field by projecting is fixed to the revolving shaft 53 of a reduction gear 52, one field of this friction cam 55 is countered, and the free actuation cam 56 is arranged at the revolving shaft 53. While the engagement crevice 57 is formed in the location which can engage with the engagement projected part 54 in the field which counters the above-mentioned friction cam 55 of this actuation cam 56, the actuation pins 58 and 59 which project from a mutually different field and engage with the back end of the lever members 13 and 14 periodically are formed in the location which conflicts to a revolving shaft 53. This actuation cam 56 is energized so that a pressure welding may always be carried out to the friction cam 55 by the spring 60 by which the end was fixed to the revolving shaft 53. It rotates centering on a shaft 61 and the Oshiage plates 13a and 14a upper-\*\* the lever members 13 and 14 depressed by the actuation pins 58 and 59. In addition, when a load is applied to the Oshiage plates 13a and 14a, it is constituted so that engagement to the engagement projected part 54 and the engagement crevice 57 may separate and the effect of a load may not attain to an operation system 10.

[0012] And detection means 20, 21, and 22 to detect change of conditions, such as press, an oscillation, and a sound, through lead wire 16, 17, and 18 are connected to the control section 15 which controls the above-mentioned motor 11. The detection means 20 consists of ON/OFF switches arranged in the stethoscope toy 23 which imitated the stethoscope, such as a pushbutton switch and a leaf switch, and when this stethoscope toy 23 is pushed against some bodies of the sewing basis toy A and switch disc-like moving-part 23a withdraws, it is constituted by making a switch 20 push and turn on so that the above-mentioned motor 11 may carry out fixed time amount actuation. Moreover, the detection means 21 consists of ON/OFF switches arranged in the almost empty toy 24 which attached the bell in the upper part and imitated GARAGARA, such as a vibration switch and a pendulum switch, and when the almost empty toy 24 is shaken so that the sewing basis toy A may be soothed, a vibration switch 21 turns it on and it carries out fixed time amount actuation of the above-mentioned motor 11. And the detection means 22 consists of ON/OFF switches arranged in the syringe toy 25 which imitated the syringe, such as a microswitch and a leaf switch, and when the head of this syringe toy 25 is forced on some bodies of the sewing basis toy A and needle 25a withdraws in the syringe toy 25, it is controlled by the control section 15 by making a switch 22 push and turn on so that the above-mentioned motor 11 carries out fixed time amount actuation.

[0013] Furthermore, the above-mentioned control section 15 is controlling the voice output section 26 to be shown in drawing 4. This voice output section 26 consists of an electronic speech circuit 27 and a loudspeaker 28, and when the above-mentioned switches 20, 21, and 22 turn on, it is constituted so that voice data which is different for every switch based on directions of a control section 15 from among the voice data memorized beforehand in the electronic speech circuit 27 may be outputted and it may be outputted as voice from a loudspeaker 28. When the switch 21 of the almost empty toy 24 turns [ the voice which feels ticklish when the switch 20 of the stethoscope toy 23 turns on ] on and the switch 22 of the syringe toy 25 turns [ a laughing voice ] on, this voice data is constituted so that the predetermined time output of the cry may be carried out, respectively. In addition, in drawing 4, in a sign 29, an electric power switch and 30 show a power-source cell, and 31 shows the driver circuit of a motor 11.

[0014] According to the equipment of the above-mentioned configuration of operation, the sewing basis toy A formed by imitating the child of a bear is sat on the body 1 of equipment (chair), and it is made to hold to an attaching part 2 so that both guide pegs may appear in the Oshiage plates 13a and 14a at the head of the lever members 13 and 14, respectively. As an electric power switch 29 is turned on in this condition, for example, it is shown in drawing 5, needle 25a of the syringe toy 25 is forced so that the arm of the sewing basis toy A may be injected. Since a switch 22 is made to turn on when it pushes and needle 25a withdraws, a control section 15 rotates a motor 11 and rotates the actuation cam 56 through a reduction gear 52 and the friction cam 55. Since the actuation pins 58 and 59 will engage with the back end of the lever members 13 and 14 by turns and will depress this if the actuation cam 56 rotates, Oshiage plate 13a/14a is raised by turns. Since the Oshiage plates 13a and 14a descend by self-weight, and the lever members 13 and 14 will be moved up and down by turns with the revolution of the actuation cam 56, it will engage with the guide peg of the sewing basis toy A by turns and a guide peg will be pushed up by turns if engagement of the actuation pins 58 and 59 and the lever members 13 and 14 separates, it is made to operate as \*\* is also flapping the

guide peg. Since it directs that a control section 15 outputs the voice of a cry to an electronic speech circuit 27 at this time and a cry is outputted from a loudspeaker 28, it can show as it is crying, while the sewing basis toy A dislikes injection and \*\* also makes a guide peg flap.

[0015] Moreover, when the stethoscope toy 23 is pressed against some bodies of the sewing basis toy A, since moving-part 23a withdraws and a switch 20 is made to turn on, as a motor 11 is rotated and being mentioned above, a control section 15 moves the lever members 13 and 14 up and down by turns, and moves the guide peg of a sewing basis toy up and down. Since a guide peg is made to flap at the same time the voice which feels ticklish from a loudspeaker 28 is outputted, since a control section 15 issues directions at this time so that the voice which feels ticklish to an electronic speech circuit 27 simultaneously may be outputted, while the sewing basis toy A feels ticklish and \*\* also raises voice, it can show as the guide peg is made to flap.

[0016] And when the almost empty toy 24 is shaken, since a switch 21 turns on by oscillation, as a motor 11 is rotated and being mentioned above, a control section 15 moves the lever members 13 and 14 up and down by turns, and moves the guide peg of a sewing basis toy up and down. Since it directs that a control section 15 outputs the voice of a laughing voice to an electronic speech circuit 27 simultaneously at this time and a laughing voice is outputted from a loudspeaker 28, it seems to laugh, while the sewing basis toy A is pleased also with \*\* and it makes a guide peg flap.

[0017] Even if it is the sewing basis toy which does not have an operation system as mentioned above, \*\* can also be operated by making it sit on a chair and making a detection means detect change of a condition as the voice output section and the operation system which utter voice or move the body exist in the interior of a sewing basis toy. And since it is not necessary to make the equipment for making it operate hold in the interior of a sewing basis toy, the original soft feel which it has [ sewing-based ] is acquired, and unnaturalness can be wiped away.

[0018] Moreover, while seeming to have blown the life into the mere sewing basis toy by making the sewing basis toy included in mind hold on the body of equipment and producing the attachment to a toy, the width of face of play can be expanded. And since the mechanism is not built in, it can clean easily, and forever, in the clean condition, a sewing basis toy can be made to be able to use it and big effectiveness can be demonstrated also in the field of health administration.

[0019] In addition, as shown in drawing 6, the voice circuit changing switch 32 is formed in an electronic speech circuit 27, and you may enable it to choose voice corresponding to the class of sewing basis toy by changing the voice circuit changing switch 32 according to the classes (a girl, a boy, animal, etc.) of sewing basis toy. Moreover, the detection means which becomes a body of equipment from sound sensors, such as a capacitor microphone which detects a sound, is arranged, an operation system is operated in response to a sound, and you may make it operate a sewing basis toy.

[0020] Moreover, with above-mentioned equipment of operation, although the detection result of a detection means is inputted into the control section through lead wire, it may form a transmitter in a detection means and may form a receiver in a control section. The result detected with the detection means is transmitted with a transmitter, by receiving with the receiver formed in the control section, an operation system can be operated distantly and sewing etc.-based toys can be operated.

[0021] Next, as shown in drawing 7 , the equipment of operation with which the body of equipment was formed by imitating a bed is explained. The quilt 41 which is the attachment component held so that the sewing basis toy A may not fall to this bed 40 is formed free [ attachment and detachment ] with the surface fastener 42.

[0022] And the detection means 43 set to head board 40a set up at the end of a bed 40 from the timer switch which imitated the alarm clock is established, and the operation system 44 which moves the guide peg of the sewing basis toy A up and down is arranged at the bed 40 bottom. This operation system 44 consists of an actuation member 45 which is arranged in the location corresponding to the guide peg of the sewing basis toy A, and moves up and down, and a motor 11 which drives this actuation member 45, and this motor 11 is controlled by the control section 15 to operate, if the above-mentioned timer switch 43 detects the predetermined passage of time. In addition, the above-mentioned control section 15 is also controlling the voice output section 26 which outputs the bell sound and cry of an alarm clock.

[0023] Since according to the equipment of the above-mentioned configuration of operation a switch 43 turns on after predetermined time progress if an electric power switch 29 is turned on and the timer switch 43 is set as shown in drawing 8 , a control section 15 operates a motor 11, moves the actuation member 45 up and down, and thrusts up the guide peg of the sewing basis toy A by turns while it makes the bell sound data of an alarm clock output to an electronic speech circuit 27 and makes a bell sound output from a loudspeaker 28. It can be made to operate so that Bata Bata of the guide peg may be carried out a sewing basis toy being raised also for \*\* with an alarm clock, and crying, even if it is the sewing basis toy which is made to also suspend an audio output while a control section 15 makes a cry output to the voice output section 26 instead of a bell sound when a guide peg begun to be thrust up up and down, and stopping a motor 11 after predetermined time progress, and does not have an operation system.

[0024] As mentioned above, the sewing basis toy held by the attaching part at the body of equipment If a detection means detects change of a condition, while operating an operation system and operating the whole body or some of sewing basis toy Since the voice corresponding to a detection means is outputted, while \*\* also gives an illusion to which sewing-basis is operating While seeming to have blown the life into the mere sewing basis toy by holding the sewing basis toy included in mind and cherishing the love over a toy, the width of face of play can be expanded. And since it can clean easily [ always ] when it becomes dirty, since there is no mechanism in a sewing basis toy, it can be forever kept idle in the clean condition, and big effectiveness can be demonstrated also in the field of health administration.

[0025] And a wheel is prepared in the body of equipment and you may make it operate an operation system by rotating this wheel. As this equipment 101 of operation is shown in drawing 9 , a baby carriage is imitated and it is formed, and by carrying out push length with a handle 105 in order, the attaching part 102 which imitated the safety belt is formed, a front wheel 103 and a rear wheel 104 are formed in the lower part, and a front wheel 103 and a rear wheel 104 are constituted so that it may rotate and move forward and retreat, and the above-mentioned front wheel 103 is being interlocked with the starting device 10.

[0026] The reduction gear 52 with which an operation system 10 gears with the driver 107 fixed to the axle 106 of a front wheel 103 as shown in drawing 10 , Counter one field

of the friction cam 55 fixed to the revolving shaft 53 of a reduction gear 52, and this friction cam 55, and free actuation cams 56 are consisted of by the revolving shaft 53. The actuation pins 58 and 59 which projected from a field which is mutually different in the location which conflicts to the revolving shaft 53 of this actuation cam 56 engage with the lever members 13 and 14 by turns. The lever members 13 and 14 depressed by the actuation pins 58 and 59 are constituted so that it may rotate centering on a shaft 61 and the Oshiage plates 13a and 14a may upper-\*\*. In addition, in drawing 9, the explanation is omitted as that drawing 3 and a same sign indicate at least the said division to be.

[0027] According to the equipment of the above-mentioned configuration of operation, sewing-basis (not shown) put on equipment 101 of operation is held by the safety belt 102 which is an attaching part, and does not fall from equipment 101 of operation. It moves forward rotating wheels 103 and 104, if equipment 101 of operation is ahead pushed with a handle 105 in this condition. Since the lever members 13 and 14 which are engagement members can be moved up and down by turns, the Oshiage plates 13a and 14 can be made to be able to engage with a sewing-based guide peg by turns, since the operation system 10 is being interlocked with the front wheel 103, and this can be moved up and down, sewing-basis can be glad and it can be made to operate as the guide peg is made to flap.

## DESCRIPTION OF DRAWINGS

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[Brief Description of the Drawings]

[Drawing 1] The perspective view of the equipment of operation concerning this invention

[Drawing 2] The side elevation of the above-mentioned equipment of operation

[Drawing 3] The decomposition perspective view showing an example of the configuration of an operation system

[Drawing 4] The block diagram of the above-mentioned equipment of operation

[Drawing 5] The perspective view showing the busy condition of the above-mentioned equipment of operation

[Drawing 6] The block diagram of other examples of equipment of operation

[Drawing 7] The perspective view showing other examples of equipment of operation

[Drawing 8] The perspective view showing the busy condition of the equipment of an example besides the above of operation

[Drawing 9] The perspective view showing another example of equipment of operation

[Drawing 10] The decomposition perspective view explaining the operation system of the equipment of the example according to above of operation

[Description of Notations]

1 Body of Equipment

2 Attaching Part

10 Operation System

12 Engagement Member

13 14 Lever member

15 Control Section

20, 21, 22 Detection means  
26 Voice Output Section

## CORRECTION OR AMENDMENT

[Kind of official gazette] Printing of amendment by the convention of 2 of Article 17 of Patent Law

[Category partition] The 2nd partition of the 1st category

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5/00

29/22

31/08

[FI]

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5/00 C

29/22 E

31/08 A

[Procedure amendment]

[Filing Date] January 14, Heisei 12 (2000. 1.14)

[Procedure amendment 1]

[Document to be Amended] Description

[Item(s) to be Amended] Claim

[Method of Amendment] Modification

[Proposed Amendment]

[Claim(s)]

[Claim 1] The sewing [ which is characterized by having the following requirements ]-based equipments for toys of operation.

(b) The attaching part which holds sewing etc.-based toys on the body of equipment is formed.

(b) A detection means to detect an external stimulus of at least one oscillation, press, etc. which operate at least one operation system which operates the above-mentioned toy, and the above-mentioned operation system on the above-mentioned body of equipment is established, and the engagement member which engages with a part of outside of the above-mentioned toy is prepared in the above-mentioned operation system.

[Claim 2] Said operation systems are the according to claim 1 sewing [ which is characterized by operating the above-mentioned operation system ]-based equipments for toys of operation by the wheel prepared in said body of equipment being interlocked with, moving this starting device, and rotating a wheel.

[Claim 3] Said operation systems are the according to claim 1 sewing [ which makes a



motor driving force and is characterized by preparing at least one detection means to detect change of conditions, such as press, an oscillation, and a sound, on said body of equipment, and the control section which operates the above-mentioned motor based on the detection result of this detection means ]-based equipments for toys of operation.

[Claim 4] Said bodies of equipment are the according to claim 3 sewing [ which is characterized by preparing the voice output section which outputs the voice corresponding to said detection means ]-based equipments for toys of operation.

[Claim 5] Said detection means are the according to claim 3 or 4 sewing [ which is characterized by inputting a detection result into said control section by the cable or wireless while dissociating from said body of equipment and being prepared movable ]-based equipments for toys of operation.

[Procedure amendment 2]

[Document to be Amended] Description

[Item(s) to be Amended] 0007

[Method of Amendment] Modification

[Proposed Amendment]

[0007]

[Means for Solving the Problem] In order to solve said technical problem, the equipments [ sewing etc.-based / concerning this invention ] for toys of operation are characterized by having the following requirements.

(b) The attaching part which holds sewing etc.-based toys on the body of equipment is formed.

(b) A detection means to detect an external stimulus of at least one oscillation, press, etc. which operate at least one operation system which operates the above-mentioned toy, and the above-mentioned operation system on the above-mentioned body of equipment is established, and the engagement member which engages with a part of outside of the above-mentioned toy is prepared in the above-mentioned operation system.

In addition, the above-mentioned operation system may be interlocked with the wheel prepared in the above-mentioned body of equipment, and may operate the above-mentioned operation system by moving this starting device and rotating a wheel.

[Procedure amendment 3]

[Document to be Amended] Description

[Item(s) to be Amended] 0028

[Method of Amendment] Modification

[Proposed Amendment]

[0028]

[Effect of the Invention] According to invention of claim 1, if an operation system operates an external stimulus with a detection means, sewing [ which was held by the attaching part at the body of equipment ]-based toys operate the whole body or some of sewing etc.-based toy, and even if an operation system is sewing-basis which is not built in, they can also operate \*\* as the operation system is built in. Moreover, since it can clean easily [ always ] when it becomes dirty, since it is not necessary to hold a mechanism in a sewing basis toy, it can be forever kept idle with a beautiful sewing basis toy, and big effectiveness can be demonstrated also in the field of health administration.

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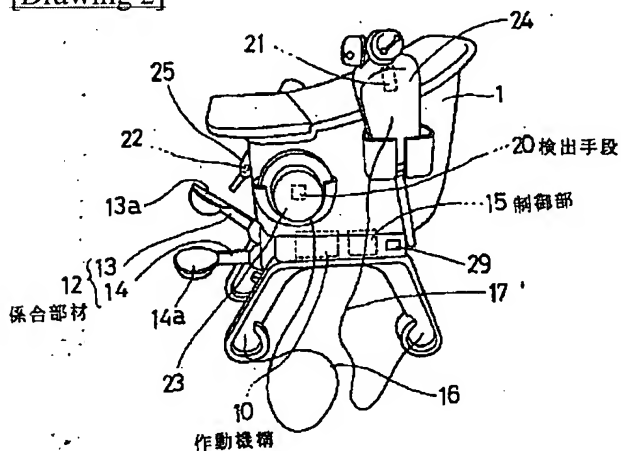
## \* NOTICES \*

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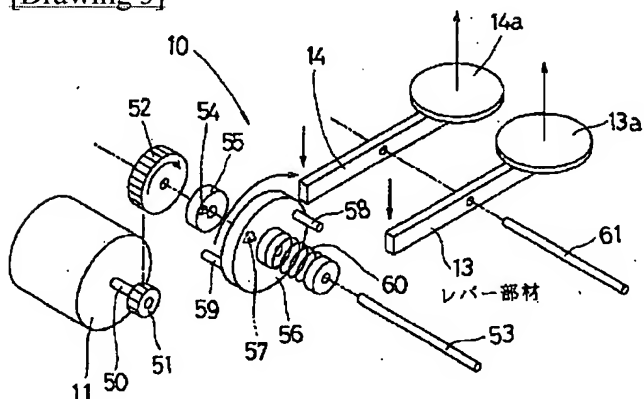
1. This document has been translated by computer. So the translation may not reflect the original precisely.
2. \*\*\*\* shows the word which can not be translated.
3. In the drawings, any words are not translated.

## DRAWINGS

[Drawing 2]



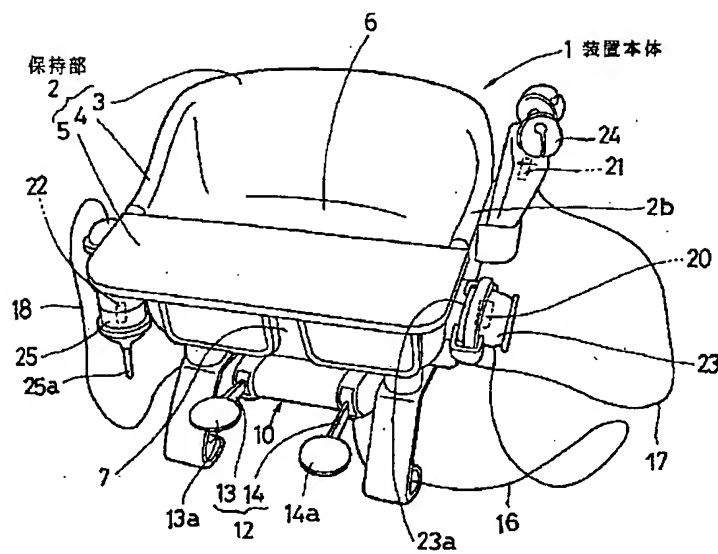
[Drawing 3]



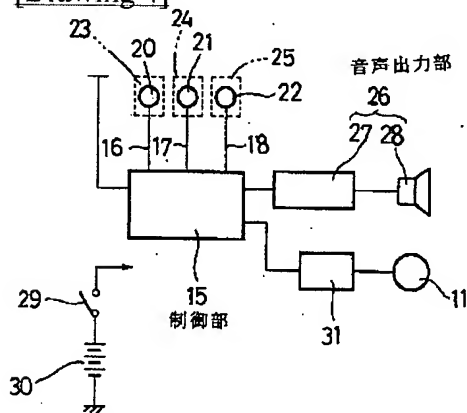
[Drawing 1]

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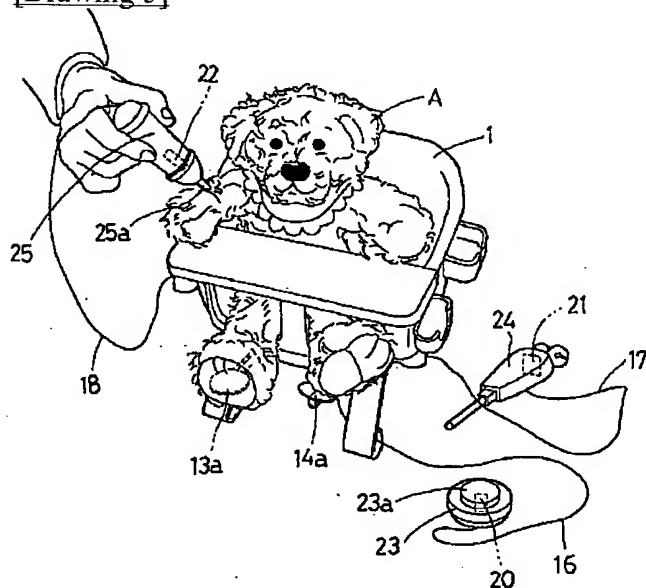
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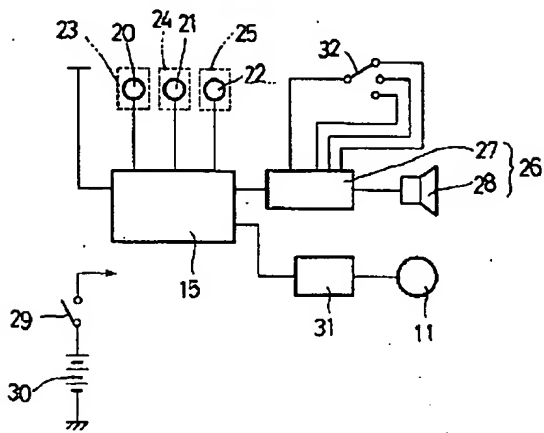
[Drawing 4]



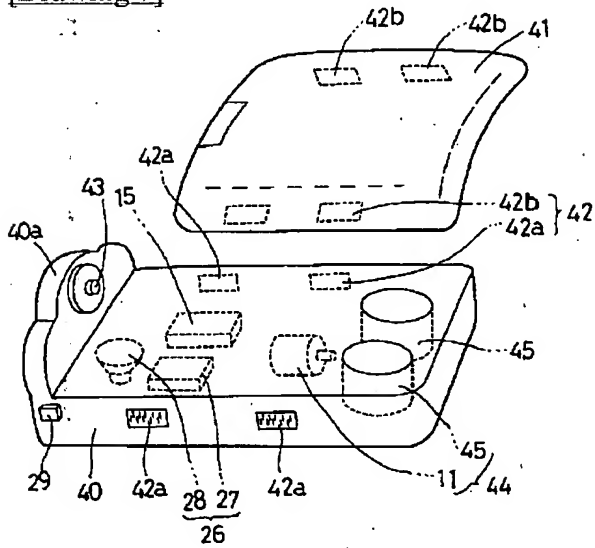
[Drawing 5]



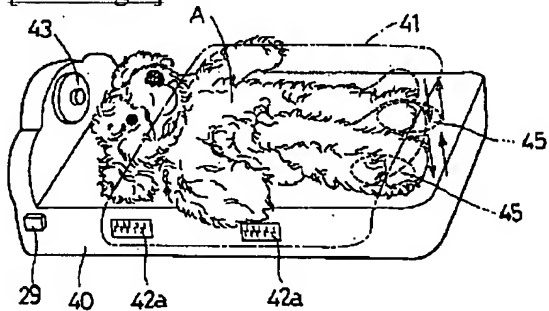
[Drawing 6]



[Drawing 7]

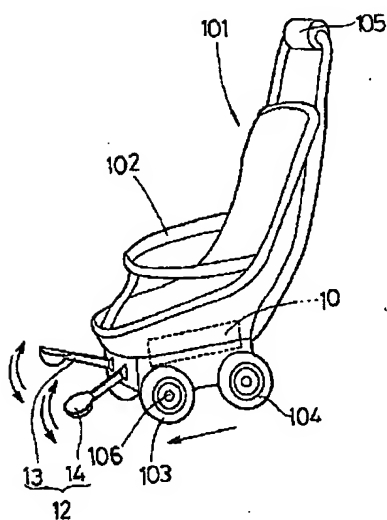


[Drawing 8]



[Drawing 9]

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[Drawing 10]

